

CLAIMS

I claim:

1. An electronic electricity meter for measuring energy consumption of a load and connectable to a standard socket connectable to a plurality of electrical service types, comprising:

5 a meter housing including a base member and a cover member; a measurement circuit board enclosed within the meter housing, the circuit board including a measurement circuit operable to determine the energy consumption;

10 a plurality of bus bars each including a pair of sensing blades, each of the bus bars being coupled to the circuit board and positioned such that the sensing blades extend through the base member in a configuration to engage the standard socket; and

15 a plurality of voltage sensing blades extending through the base member in a configuration to engage the standard socket, wherein at least one of the voltage sensing blades is movable between a first position and a second position such that the voltage sensing blade contacts a first location on the circuit board in the first position and contacts a second location on the circuit board in the second position.

2. The electricity meter of claim 1 wherein the configuration of the voltage sensing blades is the same when the voltage sensing blades are moved between the first position and the second position.

3. The electricity meter of claim 1 wherein the voltage sensing blade is movable between the first and second positions and includes a contact finger extending from a main body, the contact finger being in contact with the circuit board in both the first position and the second position to provide an electrical connection to the circuit board.

4. The electricity meter of claim 2 wherein the main body of each voltage sensing blade extends along a longitudinal axis, wherein the contact finger extends away from and is spaced from the longitudinal axis.

5. The electricity meter of claim 4 wherein the voltage sensing blade is rotatable 90° to move the voltage sensing blade between the first position and the second position.

6. The electricity meter of claim 3 wherein the circuit board includes a first contact pad and a second contact pad to receive the contact finger when the voltage sensing blade is moved between the first and second positions.

7. The electricity meter of claim 6 wherein the first contact pad and the second contact pad are spaced on opposite sides of the movable voltage sensing blade.

8. The electricity meter of claim 1 wherein configuration of the bus bar sensing blades and the voltage sensing blades is the electrical service ANSI form 9S.

9. The electricity meter of claim 1 wherein each of the voltage sensing blades are supported by the base member in both the first position and the second position.

10. An electronic electricity meter for measuring energy consumption of a load and connectable to a standard socket configured to receive a plurality of electrical service types, the electricity meter comprising:
a meter housing;

5 a measurement circuit board enclosed in the meter housing, the
circuit board including a measurement circuit operable to determine the energy
consumption;

 a meter base having a pre-selected form configured to electrically
connect to the standard socket;

10 a plurality of voltage sensing blades extending through the meter
base in a configuration to be received in the standard socket, at least one of the
voltage sensing blades being in contact with the circuit board positioned within the
meter housing, at least one of the voltage sensing blades being selectively
positionable in a first position and a second position, wherein the voltage sensing
15 blade contacts the circuit board at a different location in the first position and the
second position.

11. The electricity meter of claim 10 wherein the movable voltage
sensing blade includes a contact finger extending from a main body, the contact
finger being positionable in contact with the circuit board.

12. The electricity meter of claim 11 wherein the main body of the
movable voltage sensing blade extends along a longitudinal axis, wherein the
contact finger extends away from and is spaced from the longitudinal axis.

13. The electricity meter of claim 12 wherein the voltage sensing
blade is rotatable 90° to move the voltage sensing blade between the first position
and the second position.

14. The electricity meter of claim 10 wherein each of the voltage
sensing blades are supported by the meter base.

15. The electricity meter of claim 12 wherein the movable voltage sensing blade contacts a first contact pad in the first position and contacts a second contact pad in the second position.

16. The electricity meter of claim 15 wherein the first and second contact pads are positioned on opposite sides of the movable voltage sensing blade.

17. The electricity meter of claim 10 wherein the meter base includes a plurality of bus bars each having a pair of sensing blades, wherein the bus bar sensing blades and the plurality of voltage sensing blades are positioned in a standard configuration.

18. The electricity meter of claim 17 wherein the standard configuration is ANSI form 9S.

19. The electricity meter of claim 11 wherein the contact finger is press fit onto the main body.